

gatatcggttacgcttcattgtgccgctcaatacggatacgcactatattat
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gcacggattacttgttaaaaaagaacatgaatatgaaatcaaccatgttg
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caaggtctgtttgaattgtccggtatccctttttaggctgcatattca
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atgctgggatagctactcccgcttttgggttattaataaagatgatagg
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gctgtttcgggctgtgaggtcggttgtgcggtattgggaaacagtgccgc
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accgttcccgcagacctttcagcagaggagcgaggacggatacaggaaac
ggcaaaaaaataatataaagcgctcggctgtagaggtctagcccgtgtgg
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tccaatatattgaccgaactgagatgatttcaaaaggatacgtggcttcaa
aatcaagccatagccgcg

Fig 1

										Majority
		10		20		30		40		
1	-	-	-	-	-	-	-	-	-	U94526.seq
1	-	-	-	-	-	-	-	-	-	U94527.seq
1	-	-	-	-	-	-	-	-	-	U94528.seq
1	-	-	-	-	-	-	-	-	-	U94529.seq
1	-	-	-	-	-	-	-	-	-	U94530.seq
630	-	-	-	-	-	-	-	-	-	L15304.seq
783	-	-	-	-	-	-	-	-	-	U72704.seq
1090	-	-	-	-	-	-	-	-	-	U00456.seq
										Majority
		50		60		70		80		
1	-	-	-	-	-	-	-	-	-	U94526.seq
1	-	-	-	-	-	-	-	-	-	U94527.seq
1	-	-	-	-	-	-	-	-	-	U94528.seq
1	-	-	-	-	-	-	-	-	-	U94529.seq
1	-	-	-	-	-	-	-	-	-	U94530.seq
629	-	-	-	-	-	-	-	-	-	L15304.seq
783	-	-	-	-	-	-	-	-	-	U72704.seq
1050	-	-	-	-	-	-	-	-	-	U00456.seq
										Majority
		90		100		110		120		
1	-	-	-	-	-	-	-	-	-	U94526.seq
1	-	-	-	-	-	-	-	-	-	U94527.seq
1	-	-	-	-	-	-	-	-	-	U94528.seq
1	-	-	-	-	-	-	-	-	-	U94529.seq
1	-	-	-	-	-	-	-	-	-	U94530.seq
629	-	-	-	-	-	-	-	-	-	L15304.seq
783	-	-	-	-	-	-	-	-	-	U72704.seq
1010	-	-	-	-	-	-	-	-	-	U00456.seq
										Majority
		130		140		150		160		
1	-	-	-	-	-	-	-	-	-	U94526.seq
1	-	-	-	-	-	-	-	-	-	U94527.seq
1	-	-	-	-	-	-	-	-	-	U94528.seq
1	-	-	-	-	-	-	-	-	-	U94529.seq
1	-	-	-	-	-	-	-	-	-	U94530.seq
603	-	-	-	-	-	-	-	-	-	L15304.seq
783	-	-	-	-	-	-	-	-	-	U72704.seq
970	-	-	-	-	-	-	-	-	-	U00456.seq

	. A C A C G G G C A A G C C C T C T G C A T C C A A G C A C C C G A T A T A C T T																				Majority	
	170					180					190					200						
35	A	C	A	C	G	G	G	C	A	A	G	C	C	C	T	C	T	G	C	A	T	U94526.seq
35	A	C	A	C	G	G	G	C	A	A	G	C	C	C	T	C	T	G	C	A	T	U94527.seq
35	A	C	A	C	G	G	G	C	A	A	G	C	C	C	T	C	T	G	C	A	T	U94528.seq
35	A	C	A	C	G	G	G	C	A	A	G	C	C	C	T	C	T	G	C	A	T	U94529.seq
35	A	C	A	C	G	G	G	C	A	A	G	C	C	C	T	C	T	G	C	A	T	U94530.seq
563	A	C	A	C	G	G	G	C	A	A	G	C	C	C	T	C	T	G	C	A	T	L15304.seq
770	A	C	A	C	G	G	G	C	A	A	G	C	C	C	T	C	T	G	C	A	T	U72704.seq
930	A	C	A	C	G	G	G	C	A	A	G	C	C	C	T	C	T	G	C	A	T	U00456.seq
T C T T T G C C G T T T C C T G C A C C C G A T T T C G T T C C T C G A C C G G																					Majority	
	210					220					230					240						
75	T	C	T	T	T	G	C	C	G	T	T	T	C	C	T	G	C	A	C	C	G	U94526.seq
75	T	C	T	T	T	G	C	C	G	T	T	T	C	C	T	G	C	A	C	C	G	U94527.seq
75	T	C	T	T	T	G	C	C	G	T	T	T	C	C	T	G	C	A	C	C	G	U94528.seq
75	T	C	T	T	T	G	C	C	G	T	T	T	C	C	T	G	C	A	C	C	G	U94529.seq
75	T	C	T	T	T	G	C	C	G	T	T	T	C	C	T	G	C	A	C	C	G	U94530.seq
523	T	C	T	T	T	G	C	C	G	T	T	T	C	C	T	G	C	A	C	C	G	L15304.seq
730	T	C	T	T	T	G	C	C	G	T	T	T	C	C	T	G	C	A	C	C	G	U72704.seq
890	T	C	T	T	T	G	C	C	G	T	T	T	C	C	T	G	C	A	C	C	G	U00456.seq
A A T G T C T G C G G G A A C T G T A A T C A T C G C A T T T T C T G A G C C T																					Majority	
	250					260					270					280						
115	A	A	T	G	T	C	T	G	C	G	G	G	A	A	C	T	G	T	A	A	T	U94526.seq
115	A	A	T	G	T	C	T	G	C	G	G	G	A	A	C	T	G	T	A	A	T	U94527.seq
115	A	A	T	G	T	C	T	G	C	G	G	G	A	A	C	T	G	T	A	A	T	U94528.seq
115	A	A	T	G	T	C	T	G	C	G	G	G	A	A	C	T	G	T	A	A	T	U94529.seq
115	A	A	T	G	T	C	T	G	C	G	G	G	A	A	C	T	G	T	A	A	T	U94530.seq
483	A	A	T	G	T	C	T	G	C	G	G	G	A	A	C	T	G	T	A	A	T	L15304.seq
690	A	A	T	G	T	C	T	G	C	G	G	G	A	A	C	T	G	T	A	A	T	U72704.seq
850	A	A	T	G	T	C	T	G	C	G	G	G	A	A	C	T	G	T	A	A	T	U00456.seq
T T T T C C G G C T C G T T T T C C T G A T G G A T G C G G A A G A T A C C G T																					Majority	
	290					300					310					320						
155	T	T	T	T	C	C	G	G	C	T	C	G	T	T	T	T	C	C	T	G	A	U94526.seq
155	T	T	T	T	C	C	G	G	C	T	C	G	T	T	T	T	C	C	T	G	A	U94527.seq
155	T	T	T	T	C	C	G	G	C	T	C	G	T	T	T	T	C	C	T	G	A	U94528.seq
155	T	T	T	T	C	C	G	G	C	T	C	G	T	T	T	T	C	C	T	G	A	U94529.seq
155	T	T	T	T	C	C	G	G	C	T	C	G	T	T	T	T	C	C	T	G	A	U94530.seq
443	T	T	T	T	C	C	G	G	C	T	C	G	T	T	T	T	C	C	T	G	A	L15304.seq
650	T	T	T	T	C	C	G	G	C	T	C	G	T	T	T	T	C	C	T	G	A	U72704.seq
810	T	T	T	T	C	C	G	G	C	T	C	G	T	T	T	T	C	C	T	G	A	U00456.seq

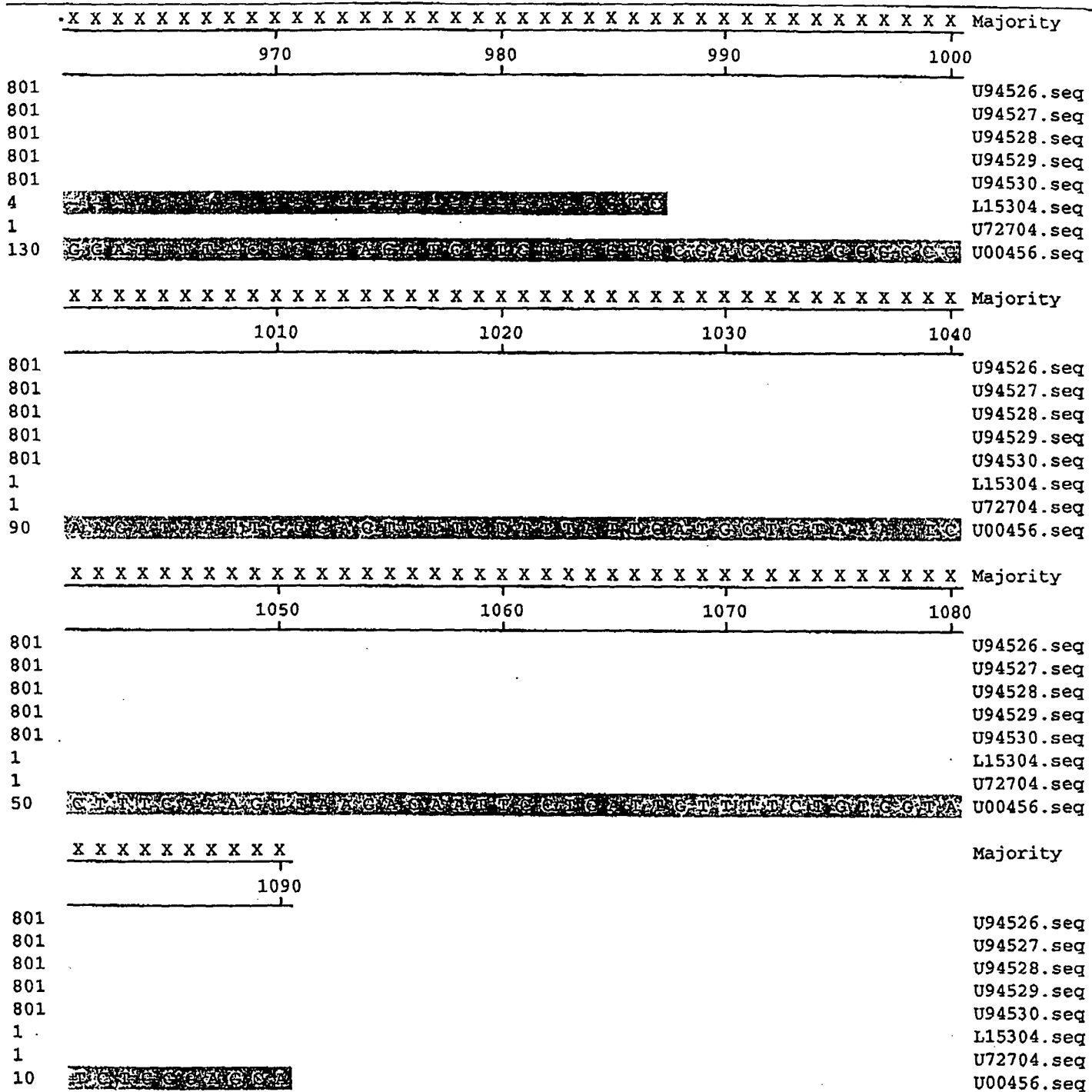
FIG. 2 (sheet 2 of 10)
Cont'd

. G G C T C A G C C G G A T T T G A T C C A C T T C G C C G A C A A T C A A A T C																														Majority												
330										340										350										360												
195	G	G	C	T	C	A	G	C	C	G	G	A	T	T	T	G	A	T	C	C	A	C	T	T	C	G	C	C	G	A	C	A	A	T	C	A	A	A	T	C	U94526.seq	
195	G	G	C	T	C	A	■	C	C	G	G	A	T	T	T	G	A	T	C	C	A	C	T	T	C	G	C	C	G	A	C	A	A	T	C	A	A	A	T	C	U94527.seq	
195	G	G	C	T	C	A	G	C	C	G	G	A	T	T	T	G	A	T	C	C	A	C	T	T	C	G	C	C	G	A	C	A	A	T	C	A	A	A	T	C	U94528.seq	
195	G	G	C	T	C	A	G	C	C	G	G	A	T	T	T	G	A	T	C	C	A	C	T	T	C	G	C	C	G	A	C	A	A	T	C	A	A	A	T	C	U94529.seq	
195	G	G	C	T	C	A	G	C	C	G	G	A	T	T	T	G	A	T	C	C	A	C	T	T	C	G	C	C	G	A	C	A	A	T	C	A	A	A	T	C	U94530.seq	
403	G	G	C	T	C	A	G	C	C	G	G	A	T	T	T	G	A	T	C	C	A	C	T	T	C	G	C	C	G	A	C	A	A	T	C	A	A	A	T	C	L15304.seq	
610	G	G	C	T	C	A	G	C	C	G	G	A	T	T	T	G	A	T	C	C	A	C	T	T	C	G	C	C	G	A	C	A	A	T	C	A	A	A	T	C	U72704.seq	
770	G	G	C	T	C	A	■	C	C	G	G	A	T	T	T	G	A	T	C	C	A	C	T	T	C	G	C	C	G	A	C	A	A	T	C	A	A	A	T	C	U00456.seq	
A T C C T C G T T C C C C A T G A C C G C A C A C C C G A C C T C A C A G C C C																														Majority												
370										380										390										400												
235	A	T	C	C	T	C	G	T	T	C	C	C	A	T	G	A	C	C	G	C	A	C	A	C	C	C	G	A	C	C	T	C	A	C	A	G	C	C	C	U94526.seq		
235	A	T	C	C	T	C	G	T	T	■	C	C	C	A	T	G	A	C	C	G	C	■	C	A	■	C	C	G	A	C	C	T	C	A	C	A	G	C	C	C	U94527.seq	
235	A	T	C	C	T	C	G	T	T	C	C	C	A	T	G	A	C	C	G	C	A	C	A	C	C	C	G	A	C	C	T	C	A	C	A	G	C	C	C	U94528.seq		
235	A	T	C	C	T	C	G	T	T	C	C	C	A	T	G	A	C	C	G	C	A	C	A	C	C	C	G	A	C	C	T	C	A	C	A	G	C	C	C	U94529.seq		
235	A	T	C	C	T	C	G	T	T	C	C	C	A	T	G	A	C	C	G	C	A	C	A	C	C	C	G	A	C	C	T	C	A	C	A	G	C	C	C	U94530.seq		
363	A	T	C	C	T	C	G	T	T	C	C	C	A	T	G	A	C	C	G	C	A	C	A	C	C	C	G	A	C	C	T	C	A	C	A	G	C	C	C	L15304.seq		
570	A	T	C	C	T	C	G	T	T	C	C	C	A	T	■	A	C	C	G	C	A	C	A	■	C	C	G	A	C	C	T	C	A	C	A	G	C	C	C	U72704.seq		
730	A	T	C	C	T	C	G	T	T	■	C	C	C	A	T	G	A	C	C	G	C	■	C	A	■	C	C	G	A	C	C	T	C	A	C	A	G	C	C	C	U00456.seq	
G A A A T C G C T T G C T C A A T T A A G A T T T T T C C A T C A T A T T G T C																														Majority												
410										420										430										440												
275	G	A	A	A	T	C	G	C	T	T	G	C	T	C	A	A	T	T	A	A	G	A	T	T	T	T	T	C	C	A	T	C	A	T	A	T	T	G	T	C	U94526.seq	
275	G	A	A	A	T	C	G	C	T	T	G	C	T	C	A	A	T	T	A	A	G	A	T	T	T	T	T	C	C	A	T	C	A	T	A	T	T	G	T	C	U94527.seq	
275	G	A	A	A	T	C	G	C	T	T	G	C	T	C	A	A	T	T	A	A	G	A	T	T	T	T	T	C	C	A	T	C	A	T	A	T	T	G	T	C	U94528.seq	
275	G	A	A	A	T	C	G	C	T	T	G	C	T	C	A	A	T	T	A	A	G	A	T	T	T	T	T	C	C	A	T	C	A	T	A	T	T	G	T	C	U94529.seq	
275	G	A	A	A	T	C	G	C	T	T	G	C	T	C	A	A	T	T	A	A	G	A	T	T	T	T	T	C	C	A	T	C	A	T	A	T	T	G	T	C	U94530.seq	
323	G	A	A	A	T	C	G	C	T	T	G	C	T	C	A	A	T	T	A	A	G	A	T	T	T	T	T	C	C	A	T	C	A	T	A	T	T	G	T	C	L15304.seq	
530	G	A	A	A	T	C	G	C	T	T	G	C	T	C	A	A	T	T	A	A	G	A	T	T	T	T	T	C	C	A	T	C	A	T	A	T	T	G	T	C	U72704.seq	
690	G	A	A	A	T	C	G	C	T	T	G	C	T	C	A	A	T	T	A	A	G	A	T	T	T	T	T	C	C	A	T	C	A	T	A	T	T	G	T	C	U00456.seq	
C T G C C G C T T C T A T C G C A G C G T T A A G T T C T T C C G T A C C G T T																														Majority												
450										460										470										480												
315	C	T	G	C	C	G	C	T	T	C	T	A	T	C	G	C	A	G	C	G	T	T	A	A	G	T	T	C	T	T	C	C	G	T	A	C	C	G	T	T	U94526.seq	
315	C	T	G	C	■	G	C	T	T	C	T	A	T	C	G	C	A	G	C	G	T	T	■	A	A	G	T	T	C	T	T	C	C	G	T	A	C	■	G	T	T	U94527.seq
315	C	T	G	C	C	G	C	T	T	C	T	A	T	C	G	C	A	G	C	G	T	T	A	A	G	T	T	C	T	T	C	C	G	T	A	C	C	G	T	T	U94528.seq	
315	C	T	G	C	C	G	C	T	T	C	T	A	T	C	G	C	A	G	C	G	T	T	A	A	G	T	T	C	T	T	C	C	G	T	A	C	C	G	T	T	U94529.seq	
315	C	T	G	C	C	G	C	T	T	C	T	A	T	C	G	C	A	G	C	G	T	T	A	A	G	T	T	C	T	T	C	C	G	T	A	C	C	G	T	T	U94530.seq	
283	C	T	G	C	C	G	C	T	T	C	T	A	T	C	G	C	A	G	C	G	T	T	A	A	G	T	T	C	T	T	C	C	G	T	A	C	C	G	T	T	L15304.seq	
490	C	T	G	C	C	G	C	T	T	C	T	A	T	C	G	C	A	G	C	G	T	T	A	A	G	T	T	C	T	T	C	C	G	T	A	C	C	G	T	T	U72704.seq	
650	C	T	G	C	■	G	C	T	T	C	T	A	T	C	G	C	A	G	C	G	T	T	■	A	A	G	T	T	C	T	T	C	C	G	T	A	C	■	G	T	T	U00456.seq

FIG. 2 (continued)
Sheet 3 of 10

	T A C T T T G G T T A C G C C A A A G G A C G A A C C T G A C C G T G C C G G C																								Majority	
	490						500						510						520							
355	T	A	C	T	T	T	G	G	T	T	A	C	G	C	C	A	A	A	G	G	A	C	G	A	A	U94526.seq
355	T	A	C	T	T	T	G	G	T	T	A	C	G	C	C	A	A	A	G	G	A	C	G	A	A	U94527.seq
355	T	A	C	T	T	T	G	G	T	T	A	C	G	C	C	A	A	A	G	G	A	C	G	A	A	U94528.seq
355	T	A	C	T	T	T	G	G	T	T	A	C	G	C	C	A	A	A	G	G	A	C	G	A	A	U94529.seq
355	T	A	C	T	T	T	G	G	T	T	A	C	G	C	C	A	A	A	G	G	A	C	G	A	A	U94530.seq
243	T	A	C	T	T	T	G	G	T	T	A	C	G	C	C	A	A	A	G	G	A	C	G	A	A	L15304.seq
450	T	A	C	T	T	T	G	G	T	T	A	C	G	C	C	A	A	A	G	G	A	C	G	A	A	U72704.seq
610	T	A	C	T	T	T	G	G	T	T	A	C	G	C	C	A	A	A	G	G	A	C	G	A	A	U00456.seq
	T T C A C A A A G A C A G G G T A G G T A A G C G C A C C C G C C T C C G G C T																								Majority	
	530						540						550						560							
395	T	T	C	A	C	A	A	A	G	A	C	A	G	G	G	T	A	G	G	T	A	A	G	C	G	U94526.seq
395	T	T	C	A	C	A	A	A	G	A	C	A	G	G	G	T	A	G	G	T	A	A	G	C	G	U94527.seq
395	T	T	C	A	C	A	A	A	G	A	C	A	G	G	G	T	A	G	G	T	A	A	G	C	G	U94528.seq
395	T	T	C	A	C	A	A	A	G	A	C	A	G	G	G	T	A	G	G	T	A	A	G	C	G	U94529.seq
395	T	T	C	A	C	A	A	A	G	A	C	A	G	G	G	T	A	G	G	T	A	A	G	C	G	U94530.seq
203	T	T	C	A	C	A	A	A	G	A	C	A	G	G	G	T	A	G	G	T	A	A	G	C	G	L15304.seq
410	T	T	C	A	C	A	A	A	G	A	C	A	G	G	G	T	A	G	G	T	A	A	G	C	G	U72704.seq
570	T	T	C	A	C	A	A	A	G	A	C	A	G	G	G	T	A	G	G	T	A	A	G	C	G	U00456.seq
	T G T C A C C T T T A T C A A T C A T T T G A A A T T C G G G A A C G G C G A T																								Majority	
	570						580						590						600							
435	T	G	T	C	A	C	C	T	T	T	A	T	C	A	A	T	C	A	T	T	T	G	A	A	A	U94526.seq
435	T	G	T	C	A	C	C	T	T	T	A	T	C	A	A	T	C	A	T	T	T	G	A	A	A	U94527.seq
435	T	G	T	C	A	C	C	T	T	T	A	T	C	A	A	T	C	A	T	T	T	G	A	A	A	U94528.seq
435	T	G	T	C	A	C	C	T	T	T	A	T	C	A	A	T	C	A	T	T	T	G	A	A	A	U94529.seq
435	T	G	T	C	A	C	C	T	T	T	A	T	C	A	A	T	C	A	T	T	T	G	A	A	A	U94530.seq
163	T	G	T	C	A	C	C	T	T	T	A	T	C	A	A	T	C	A	T	T	T	G	A	A	A	L15304.seq
370	T	G	T	C	A	C	C	T	T	T	A	T	C	A	A	T	C	A	T	T	T	G	A	A	A	U72704.seq
530	T	G	T	C	A	C	C	T	T	T	A	T	C	A	A	T	C	A	T	T	T	G	A	A	A	U00456.seq
	G C C C G C A T T T T T T G T A A G A A T G T A G G C C A G T G A T T T G T C C																								Majority	
	610						620						630						640							
475	G	C	C	C	G	C	A	T	T	T	T	T	T	T	G	T	A	A	G	A	A	T	G	T	A	U94526.seq
475	G	C	C	C	G	C	A	T	T	T	T	T	T	T	G	T	A	A	G	A	A	T	G	T	A	U94527.seq
475	G	C	C	C	G	C	A	T	T	T	T	T	T	T	G	T	A	A	G	A	A	T	G	T	A	U94528.seq
475	G	C	C	C	G	C	A	T	T	T	T	T	T	T	G	T	A	A	G	A	A	T	G	T	A	U94529.seq
475	G	C	C	C	G	C	A	T	T	T	T	T	T	T	G	T	A	A	G	A	A	T	G	T	A	U94530.seq
123	G	C	C	C	G	C	A	T	T	T	T	T	T	T	G	T	A	A	G	A	A	T	G	T	A	L15304.seq
330	G	C	C	C	G	C	A	T	T	T	T	T	T	T	G	T	A	A	G	A	A	T	G	T	A	U72704.seq
490	G	C	C	C	G	C	A	T	T	T	T	T	T	T	G	T	A	A	G	A	A	T	G	T	A	U00456.seq

FIG. 2 (cont'd)
Sheet 4 of 10



Decoration 'Decoration #1': Shade (with black at 40% fill) residues that differ from the Consensus.

FIG. 2 (cont'd)
Sheet 7 of 10

1 aacgatgccg ccatacctcct gcaaaaaaag atcaaacacgg gcaagccctc tgcataccaag
 61 cacccgatat actttctttg ccgtttcctg cacccgattt cgttcctcga ccggaatgtc
 121 tgcgggaact gtaatcatcg cattttctga gcctttttcc ggctcgtttt cctgatggat
 181 gcggaagata ccgtggctca gccggatttg atccacttcg ccgacaatca aatcatcctc
 241 gttcccatg accgcacacc cgacctcaca gcccgaaatc gcttgctcaa ttaagatttt
 301 tccatcatat tgtcctgccg cttctatcgc agcgtaaagt tcttcctgac cgtttacttt
 361 ggttacgcca aaggacgaac ctgaccgtgc cggcttcaca aagacagggg aggtaagcgc
 421 accgcctcc ggcttgctac ctttatcaat catttgaaat tcgggaacgg cgatgcccg
 481 attttttgta agaatgtagg ccagtgtatt gtccatgcaa gctgcggagc tttgaatata
 541 acagcccaca taggggatac cagacaatac aaacagcccc tgtatcgac catcctcccc
 601 gcatttgcca tgcaaaaccg ggaaagccac atcaatacgc cgtgtttcgt attcgctttc
 661 tttcatgaca agcagcccat gcgttttctc atccggggag agtatggcgg ggagactgtc
 721 ggcttcccat tccgtacatg gcttcttgca tagcttccat acaccgtttt ttgtaattcc
 781 gatgtagtgc ggatcgaatt t

SEQ ID NO: 10

1 aacgatgccg ccatacctcct gcaaaaaaag atcaaacacga gcaagccctc tgcataccaag
 61 cacccgatat actttctttg ccgtttcctg cacccgattt cgttcctcga ccggaatgtc
 121 tgcgggaact gtaatcatcg cattctctga gcctttttcc ggctcgtttt cctgatggat
 181 gcggaagata ccgtggctca accggatttg atccacttcg ccgacaatca aatcatcctc
 241 gtttcccatg accgcgcagc cgacctcaca gcccgaaatc gcttgctcaa ttaagatttt
 301 tccatcatat tgtcctgctg cttctatcgc agcgtttagt tcttcctgac tgtttacttt
 361 ggttacgcca aaggacgaac ctgaccgtgc cggcttcaca aagacagggg aggtaagcgt
 421 cctcgccctcc ggtttgctac ctttttcaat catttgaaat tcggggacgg cgatgcccg
 481 attttttgta agaatgtagg ccagtgtatt gtccatgcaa gctgcggagc tttgaatata
 541 gcagcctaca taggggatac cagacaattc aaacagaccc tgtatcgac catcctcccc
 601 gcatttgcca tgcaaaaccg ggaaagccac gtcaatacgc cgagtttcgt attctctttc
 661 tttcatgaca agcagaccat gcgttttctc atccggggag aatatggcgg ggagactata
 721 ggcttcccat tccgtacatg gcttcttgca tagcttccat acgcggtttt ttgtaattcc
 781 gatgtagtgc ggatcgaatt t

SEQ ID NO: 11

1 aacgatgccg ccatacctcct gcaaaaaaag atcaaacacgg gcaagccctc tgcataccaag
 61 cacccgatat actttctttg ccgtttcctg cacccgattt cgttcctcga ccggaatgtc
 121 tgcgggaact gtaatcatcg cattttctga gcctttttcc ggctcgtttt cctgatggat
 181 gcggaagata ccgtggctca gccggatttg atccacttcg ccgacaatca aatcatcctc
 241 gttcccatg accgcacacc cgacctcaca gcccgaaatc gcttgctcaa ttaagatttt
 301 tccatcatat tgtcctgccg cttctatcgc agcgtaaagt tcttcctgac cgtttacttt
 361 ggttacgcca aaggacgaac ctgaccgtgc cggcttcaca aagacagggg aggtaagcgc
 421 accgcctcc ggcttgctac ctttatcaat aatttgaaat tcgggaacgg cgatgcccg
 481 attttttgta agaatgtagg ccagtgtatt gtccatgcaa gctgcggagc tttgaatata
 541 acagcccaca taggggatac cagacaatac aaacagcccc tgtatcgac catcctcccc
 601 gcatttgcca tgcaaaaccg ggaaagccac atcaatacgc cgtgtttcgt attcgctttc
 661 tttcatgaca agcagcccat gcgttttctc atccggggag agtatggcgg ggagactgtc
 721 ggcttcccat tccgtacatg gcttcttgca tagcttccat acaccgtttt ttgtaattcc
 781 gatgtagtgc ggatcgaatt t

SEQ ID NO: 12

FIG. 2 (cont'd)
 sheet 8 of 10

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1 aacgatgccg ccacccctcct gcaaaaaaag atcaaacacgg gcaagccctc tgcattccaag
61 cacccgatat actttctttg ccgtttcctg cacccgattt cgttcctcga ccggaatgtc
121 tgcgggaact gtaatcatcg cattttctga gcctttttcc ggctcgtttt cctgatggat
181 gcggaagata ccgtggctca gccggatttg atccacttcg ccgacaatca aatcatcctc
241 gttccccatg accgcacacc cgacctcaca gcccgaaatc gcttgctcaa ttaagatttt
301 tccatcatat tgcctgccc cttctatcgc agcgtaaagt tcttccgtac cgtttacttt
361 ggttacgcca aaggacgaac ctgaccgtgc cggcttcaca aagacagggg aggtaagcgc
421 acccgccctc ggcttggtac ctttatcaat aatttgaaat tcgggaacgg cgatgcccg
481 attttttgta agaattgtagg ccagtgtatt gtccatgcaa gctgaggagc tttgaatatc
541 acagcccaca taggggatac cagacaatac aaacagcccc tgtatcgcac catcctcccc
601 gcatttgcca tgcaaaaccg ggaaagccac atcaatacgc cgtgtttcgt attcgctttc
661 tttcatgaca agcagcccat gcgttttctt atccggggag agtatggcgg ggagactgtc
721 ggcttcccat tccgtacatg gcttcttgca tagcttccat acaccgtttt ttgtaattcc
781 gatgtagtgc ggatcgaatt t

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SEQ ID NO: 13

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1 aacgatgccg ccacccctcct gcaaaaaaag atcaaacacgg gcaagccctc tgcattccaag
61 cacccgatat actttctttg ccgtttcctg cacccgattt cgttcctcga ccggaatgtc
121 tgcgggaact gtaatcatcg cattttctga gcctttttcc ggctcgtttt cctgatggat
181 gcggaagata ccgtggctca gccggatttg atccacttcg ccgacaatca aatcatcctc
241 gttccccatg accgcacacc cgacctcaca gcccgaaatc gcttgctcaa ttaagatttt
301 tccatcatat tgcctgccc cttctatcgc agcgtaaagt tcttccgtac cgtttacttt
361 ggttacgcca aaggacgaac ctgaccgtgc cggcttcaca aagacagggg aggtaagcgc
421 acccgccctc ggcttggtac ctttatcaat aatttgaaat tcgggaacgg cgatgcccg
481 attttttgta agaattgtagg ccagtgtatt gtccatgcaa gctgaggagc tttgaatatc
541 acagcccaca taggggatac cagacaatac aaacagcccc tgtatcgcac catcctcccc
601 gcatttgcca tgcaaaaccg ggaaagccac atcaatacgc cgtgtttcgt attcgctttc
661 tttcatgaca agcagcccat gcgttttctt atccggggag agtatggcgg ggagactgtc
721 ggcttcccat tccgtacatg gcttcttgca tagcttccat acaccgtttt ttgtaattcc
781 gatgtagtgc ggatcgaatt t

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SEQ ID NO: 14

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1 gaggatgggt gcatccaggg actgtttgaa ttgtctggta tcccctatgt gggctgtgat
61 attcaaagct ccgcagcttg catggacaaa tcaactggct acattcttac aaaaaatgcg
121 ggcattgccg ttcccgaatt tcaaatgatt gataaagggt acaagccgga ggcgggtg
181 cttacctacc ctgtctttgt gaagccggca cggtcagggt cgtcctttgg cgtaacaaa
241 gtaaacggta cggaagaact taacgtcgcg atagaagcgg caggacaata tgatggaaaa
301 atcttaattg agcaagcgat ttcgggctgt gaggtcgggt gtgcggtcat ggggaacgag
361 gatgatttga ttgtcggcga agtggatcaa atccggctga gccacggtat cttccgcac
421 catcaggaaa acgagccgga aaaaggctca gaaaatgcga tgattacagt tcccgcagac
481 attccggctg aggaacgaaa tcgggtgcag gaaacggcaa agaaagtata tcgggtgctt
541 ggatgcagag ggcttgcccg tgttgatctt tttttgcagg aggatggcgg catcgttcta
601 aatgaggtca acaccctgcc cggcttcacg

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SEQ ID NO: 15

FIG. 2 (cont'd)
Sheet 9 of 10

1 gaaaaattcg atccgcacta catcggaatt aaaaaagggt gtgtatggaa gctatgcaag
 61 aagccatgta cggaatggga agccgacagt ctccccgcca tactctcccc ggataggaaa
 121 acgcatgggtc tgcttgatcat gaaagaaagc gaatacgaaa cacggcgat tgatgtggct
 181 ttcccagttt tgcattggca atcgggggag gacgtgacga tacagggttt atttgaattg
 241 tctggcatcc cctatgtggg ctgcgatatt caaagctccg cagcttgcat ggacaaatca
 301 ctggcctaca ttcttcaaaa aaatgcgggc atcgccgttc ccgaatttca aatgattgat
 361 aaaggtgaca agccggagac ggggtgcgctt acctaccctg tctttgtgaa gccggcacgg
 421 tcaggttcgt cctttggctt aaccaaagta aacggtacgg aagaacttaa cgctgagata
 481 gaagcggcag gacaatatga tggaaaaatc ttaattgagc aagcgatttc gggctgtgag
 541 gtcggctgtg cgggttatggg gaacgaggat gatttgattg tcggcgaagt ggatcaaatc
 601 cgggtgagc atggtatctt ccgcattccat caggaaaaac agccggaaaa aggatcagag
 661 aatgcgatga ttaccgttcc tgcagacatc ccagtcgggg aacgaaatcg ggtgcaggaa
 721 acggcaaaga aagtatatcg ggcgcttgga tgcagagggc ttgcccggtg tgatcttttt
 781 ttg

SEQ ID NO: 16

1 tgctgcgaga taccacagaa aacaatcagg aattgtctta actttgaaag gagtttacag
 61 catgaataaaa ataaaaagtcg caattatctt cggcggttgc tcggaggaaac atgatgtgtc
 121 ggtaaaatcc gcaatagaaa ttgctgcgaa cattaatact gaaaaattcg atccgcacta
 181 catcggaatt aaaaaaacg gcgtatggaa gctatgcaag aagccatgta cggaatggga
 241 agccgatagt ctccccgcca tattctcccc ggataggaaa acgcatgggtc tgcttgatcat
 301 gaaagaaaga gaatacgaaa ctcgccgat tgacgtggct ttcccggttt tgcattggca
 361 atgcggggag gatggtgacga tacagggtct gtttgaattg tctggtatcc cctatgtagg
 421 ctgcgatatt caaagctccg cagcttgcat ggacaaatca ctggcctaca ttcttcaaaa
 481 aaatgcgggc atcgccgtcc ccgaatttca aatgattgaa aaaggtgaca aaccggaggc
 541 gaggacgctt acctaccctg tctttgtgaa gccggcacgg tcaggttcgt cctttggcgt
 601 aaccaaagta aacagtacgg aagaactaaa cgctgagata gaagcagcag gacaatatga
 661 tggaaaaatc ttaattgagc aagcgatttc gggctgtgag gtcggctgag cggatcatggg
 721 aaacgaggat gatttgattg tcggcgaagt ggatcaaatc cggttgagcc acggtatctt
 781 ccgcattccat caggaaaaac agccggaaaa aggctcagag aatgcgatga ttatcgttcc
 841 agcagacatt ccggtcgagg aacgaaatcg ggtgcaagaa acggcaaaga aagtatatcg
 901 ggtgcttgga tgcagagggc ttgctcggtg tgatcttttt ttgcaggagg atggcgcat
 961 cgttctaaac gaggtcaata cctgcccgg ttttacatcg tacagccgct atccacgcat
 1021 ggcggctgcc gcaggaaatca cgcttcccgc actaattgac agcctgatta cattggcgat
 1081 agagaggtga

SEQ ID NO: 5

FIG. 2 (cont'd)

Sheet 10 of 10

Escherichia coli
Klebsiella pneumoniae
Serratia marcescens
Citrobacter freundii
Proteus mirabilis
Salmonella enteritidis
Pseudomonas aeruginosa
Haemophilus influenzae
Haemophilus parainfluenzae
Candida glabrata
Candida albicans
Candida krusei
Candida parapsilosis
Bacillus cereus
Listeria monocytogenes
Corynebacterium urealyticum
Archanobacterium haemolyticum
Erysipelothrix rhusopathiae
Stomatococcus
Micrococcus luteus
Staphylococcus saprophyticus
Staphylococcus aureus
Staphylococcus epidermidis
Group A Streptococcus
Streptococcus mitis
Streptococcus pneumoniae
Group B Streptococcus
VanA Enterococcus faecium
VanB Enterococcus faecium
Non VanA/VanB Enterococcus faecium

Fig 3